

AMENDMENTS TO THE CLAIMS:

Please replace the claims with the claims provided in the listing below wherein status, amendments, additions and cancellations are indicated.

1.(Cancelled)

2.(Currently Amended) An EGR cooler comprising a multiplicity of round in section tubes which are juxtaposed spaced apart from each other, with both ends of the tubes leading to a pair of headers, with exhaust gases to be cooled circulating within the tubes, and with a cooling fluid circulating around outer surfaces of the tubes,

wherein the round in section tubes are plastically deformed in one plane crossing centerlines of the tubes such that corrugated exhaust gas flow paths are formed inside the tubes; and

~~The EGR cooler of claim 1,~~

wherein

the centerlines of the tubes are aligned with each other, with a multiplicity of recessed portions being formed inward from the outer surfaces of the tubes apart from each other in the longitudinal direction, with the multiplicity of recessed portions being arranged such that inner and outer surfaces of cross sections on the one plane are formed in mountain shapes and that ridgelines of top portions of the mountains are orthogonal to the one plane, wherein

F-8602

adjacent recessed portions are formed at positions differing from each other by 180 degrees in the circumferential direction, and wherein

both longitudinal-direction end portions of the tubes are such that round portions are formed whose cross sections orthogonal to axial lines are round.

3.(Cancelled)

4.(Currently Amended) An EGR cooler comprising a multiplicity of round in section tubes which are juxtaposed spaced apart from each other, with both ends of the tubes leading to a pair of headers, with exhaust gases to be cooled circulating within the tubes, and with a cooling fluid circulating around outer surfaces of the tubes,

wherein the round in section tubes are plastically deformed in one plane crossing centerlines of the tubes such that corrugated exhaust gas flow paths are formed inside the tubes;

wherein the tubes comprise tubes of the same form whose centerlines are formed so as to corrugate within the one plane, with the tubes being disposed in parallel so that phases of the wave forms of the tubes coincide with each other in each row; and

~~The EGR cooler of claim 3,~~

F-8602

wherein the tubes are disposed so that the phases of the waves in adjacent rows differ from each other by 180 degrees.

5.(Currently Amended) An EGR cooler comprising a multiplicity of round in section tubes which are juxtaposed spaced apart from each other, with both ends of the tubes leading to a pair of headers, with exhaust gases to be cooled circulating within the tubes, and with a cooling fluid circulating around outer surfaces of the tubes.

wherein the round in section tubes are plastically deformed in one plane crossing centerlines of the tubes such that corrugated exhaust gas flow paths are formed inside the tubes;

wherein the tubes comprise tubes of the same form whose centerlines are formed so as to corrugate within the one plane, with the tubes being disposed in parallel so that phases of the wave forms of the tubes coincide with each other in each row; and

~~The EGR cooler of claim 3,~~

wherein planes in the corrugated direction of the centerlines of the tubes are disposed so as to be inclined at the same angle θ with respect to a horizontal plane.

6.(Currently Amended) An EGR cooler comprising a multiplicity of round in section tubes which are juxtaposed spaced apart from each other, with both ends

F-8602

of the tubes leading to a pair of headers, with exhaust gases to be cooled circulating within the tubes, and with a cooling fluid circulating around outer surfaces of the tubes,

wherein the round in section tubes are plastically deformed in one plane crossing centerlines of the tubes such that corrugated exhaust gas flow paths are formed inside the tubes;

wherein the tubes comprise tubes of the same form whose centerlines are formed so as to corrugate within the one plane, with the tubes being disposed in parallel so that phases of the wave forms of the tubes coincide with each other in each row; and

~~The EGR cooler of claim 3,~~

wherein the tubes are formed so as to be face only one side on the plane in which the waves are directed due to balance of gravity of the entire tubes when undersurfaces of two spaced apart top portions of the wave forms of the centerlines are supported by plate members that are orthogonal to the centerlines.

7.(Currently Amended) An EGR cooler comprising a multiplicity of round in section tubes which are juxtaposed spaced apart from each other, with both ends of the tubes leading to a pair of headers, with exhaust gases to be cooled circulating within the tubes, and with a cooling fluid circulating around outer surfaces of the tubes.

F-8602

wherein the round in section tubes are plastically deformed in one plane crossing centerlines of the tubes such that corrugated exhaust gas flow paths are formed inside the tubes;

wherein the tubes comprise tubes of the same form whose centerlines are formed so as to corrugate within the one plane, with the tubes being disposed in parallel so that phases of the wave forms of the tubes coincide with each other in each row; and

~~The EGR cooler of claim 3,~~

wherein at undersurface sides of two spaced apart top portions of the wave forms of the centerlines of the tubes, the tubes include tube support portions formed in "V" shapes in section.

8.(Currently Amended) The EGR cooler of any one of claims[[3]] 4 to 7, wherein the longitudinal-direction end portions of the tubes have straight centerlines.